

### IN THE SPECIFICATION

Please amend the specification as follows:

Please amend the paragraph beginning on page 19, line 26 as follows:

Figures 4A-C ~~Figure-4~~. Luciferase activity in HeLa cells after infection with A) AV2.RSVLuc (left panel of Figure 4A) or AV2.RSVlucCap5 (right panel of Figure 4A) (100 or 1000 ppc) or B) AV2CMVluc or AV2CMVluc Cap5 (500 ppc), and LLnL (40  $\mu$ M), Z-LLL (4  $\mu$ M), or doxorubicin (0.5 or 1.0  $\mu$ M). C) Comparison of CMV and RSV promoters in AAV-2 vectors (1000 ppc, left panel of Figure 4C; 100 ppc, right panel of Figure 4C) in HeLa cells.

Please amend the paragraph beginning on page 20, line 6 as follows:

Figures 6A-B ~~Figure-6~~. Luciferase activity in ferret fibroblasts after infection with AV2CMVluc or AV2CMVluc Cap5 (500 ppc), and administration ~~eo-administration~~ of LLnL (40, 200 or 400  $\mu$ M), Z-LLL (4  $\mu$ M), or doxorubicin (1  $\mu$ M). A) Comparison of AV2CMVluc and AV2CMVlucCap5. B) RLU at 1 and 5 days for AV2CMVluc (left panel of Figure 6B) and AV2CMVlucCap5 (right panel of Figure 6B) in ferret fibroblasts.

Please amend the paragraph beginning on page 20, line 13 as follows:

Figure 8. Luciferase activity in polarized airway epithelial cells at 3 days ~~[[A]]~~ and 15 days ~~[[B]]~~ after apical infection with  $5 \times 10^9$  AV2RSVLuc or AV2RSVlucCap5 and administration ~~eo-administration~~ of LLnL (40  $\mu$ M) or doxorubicin (1.0 or 5.0  $\mu$ M) or a combination of LLnL (40  $\mu$ M) and doxorubicin (1.0 or 5.0  $\mu$ M). ~~The panel in the upper panel~~ right summarizes RLU on days 3 (see middle panel for data from day 3) and 15 (see lower panel for data from day 5).

Please amend the paragraph beginning on page 20, line 17 as follows:

Figures 9A-B ~~Figure 9~~. Luciferase activity in C57Bl6 mouse lung (upper panel in each of Figures 9A-B) or trachea and bronchi (lower panel in each of Figures 9A-B) at 2 weeks (A) or C57Bl6 mouse lung (upper panel) or trachea and bronchi (lower panel) at 6 weeks (B) after infection (via nasal aspiration) with AV2RSVlucCap5 (3 times with 10  $\mu$ l of  $2 \times 10^9$  particles/ $\mu$ l in 40  $\mu$ l, for a total of  $6 \times 10^{10}$  particles) and administration ~~co-administration~~ of Z-LLL (200  $\mu$ M), doxorubicin (200  $\mu$ M), or a combination of Z-LLL (200  $\mu$ M) and doxorubicin (200  $\mu$ M). For each group, n = 12. Lung and trachea with some bronchial tissue was isolated and, after extraction, luciferase activity/total protein in the tissue extraction determined.

Please amend the paragraph beginning on page 20, line 24 as follows:

Figure 10. Luciferase activity in mouse lung (upper panel) ~~[(A)]~~ or trachea and bronchi (lower panel) ~~[(B)]~~ at 2 weeks, 6 weeks or 3 months after infection with AV2RSVlucCap5 and administration ~~co-administration~~ of Z-LLL (200  $\mu$ M), doxorubicin (200  $\mu$ M) or a combination of Z-LLL (200  $\mu$ M) and doxorubicin (200  $\mu$ M). The luciferase assay was performed at 80% sensitivity. Lung and trachea with some bronchial tissue was isolated and, after extraction, luciferase activity/total protein in the tissue extraction determined.

Please amend the paragraph beginning on page 20, line 30 as follows:

Figures 11A-B ~~Figure 11~~. The effects of proteasome inhibitors LLnL (left panel of each of Figures 11A-B) and Doxorubicin (Dox) (right panel of each of Figures 11A-B) on AV2Luc and AV2/5Luc transduction of immortalized human airway cell lines IB3 (Figure 11 panel A) and A549 (Figure panel B) were evaluated. Proteasome-modulating agents were co-administered with each rAAV vector (MOI of 500 particles per cell) at the time of infection and

transduction was evaluated 24 hours later. Various concentrations of each chemical were evaluated as indicated in each graph. Data represent the mean (+/-SEM) relative luciferase activity experiment (N=4).

Please amend the paragraph beginning on page 54, line 20 as follows:

These formulations can contain pharmaceutically acceptable vehicles and adjuvants which are well known in the prior art. It is possible, for example, to prepare solutions using one or more organic solvent(s) that is/are acceptable from the physiological standpoint, chosen, in addition to water, from solvents such as acetone, ethanol, isopropyl alcohol, glycol ethers such as the products sold under the name "Dowanol", polyglycols and polyethylene glycols, C<sub>1</sub>-C<sub>4</sub> alkyl esters of short-chain acids, preferably ethyl or isopropyl lactate, fatty acid triglycerides such as the products marketed under the name MIGLYOL<sup>®</sup> "Miglyol", isopropyl myristate, animal, mineral and vegetable oils and polysiloxanes.

Please amend the table beginning on page 84, line 8 as follows:

Table 2. *In Vivo* Enhancement of FVIII rAAV Transduction

Day 14 Results

<u>Sample</u>	<u>Animal # and Final Result ([DF*]ng/mL) Coatest (mU/mL)</u>	
Group 1 Vehicle		
	801 < 0.63	0
	804 < 0.63	0
	805 < 0.63	0
	847 < 0.63	0
Group 2 AAV2/5-HFN3/EBP-FVIII		
	816 < 0.63	0
	817 < 0.63	0
	818 0.92	0
	819 < 0.63	0
	820 < .63	0
	834 0.9	0

Group 2 AAV2/5-HFN3/EBP-FVIII + Doxil

870 60.45	171
871 26.29	0
872 12.395	14
873 44.3	30
874 12.135	122
875 31.04	94

## 2.X.10, Day 25 FVIII ELISA

<u>Sample</u>	<u>Animal # and Final Result</u>
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## Group 1 Vehicle

806 < 0.63	0
807 < 0.63	0
808 < 0.63	0
849 < 0.63	0

## Group 2 AAV2/5-HFN3/EBP-FVIII

821 < 0.63	0
822 < 0.63	0
823 < 0.63	0
824 1.27	0
825 0.72	0
833 0.74	0

## Group 3 AAV2/5-HFN3/EBP-FVIII + Doxil (no spikes)

841 16.785	49.833
842 12.425	37.282
843 13.685	41.466
844 35.225	91.842
845 7.815	12.974
846 24.02	54.853